

## Pugheadedness in the Spotted Seatrout

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PUGHEADEDNESS has been described in many teleost fishes (Dawson, 1964, 1966), but the presence of this anomaly in a spotted seatrout, *Cynoscion nebulosus* (Cuvier), is apparently the first record of occurrence in the family Sciaenidae.

Gudger (1930) described structural malformations accompanying this condition. Mansueti (1960) reported environment and heredity (not physical injury) to be probable causative factors. Eigenmann (1894) thought malformation in *Cymatogaster aggregata* was due to overcrowding after hatching from the egg.

Mansueti (1958) observed pugheaded and normal siblings that hatched from eggs of the same parents. Isaacson (1965) removed 14 pugheaded embryos (a typical complement of young for a female of the size observed) from a phenotypically normal black perch, *Embiotoca jacksoni*. These two reports strongly suggest a genetical basis for the anomaly.

The pugheaded spotted seatrout (Fig. 1) was captured by hook-and-line on 3 April 1968 in Lake Chauvin, Louisiana. The specimen was an adult female weighing 438 g and measuring 302 mm standard length.

Scale analysis revealed a decidedly slower growth rate after first annular formation than is typical of the species. Scales exhibited six year-marks with the most recent having just been formed at the margin. Calculated standard length at annulus VI of trout collected from the Texas coast was 440 mm (Pearson, 1929). Trout collected from western Florida averaged 430 mm at time of sixth annular formation (Welsh and Breder, 1924). Length attained by the pugheaded specimen approximates size characteristic of normal 3-year-old fish. Evidently, feeding efficiency of the fish was significantly limited by the pugheaded condition.

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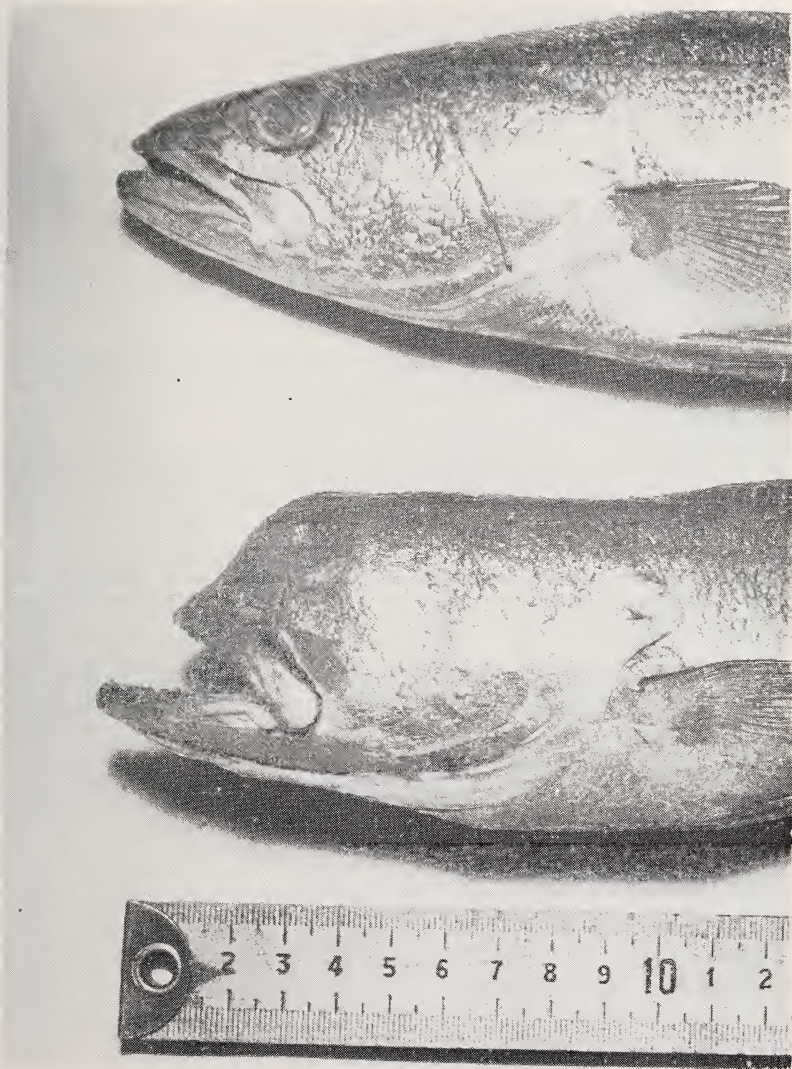


Fig. 1. Pugheaded spotted seatrout, 302 mm standard length, with normal counterpart above.

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